

Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
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In The Matter of

Amendment Of The Commissions
Rules to Establish New Personal
Communications Services

) GEN Docket No. 90-314
) ET Docket No. 92-100
)
) RM-7140, RM-7175, RM-7617
) RM-7618, RM-7760, RM-7782
) RM-7860, RM-7977, RM-7978
) RM-7979, RM-7980
)
) PP-35 through PP-40,
) PP-79 through PP-85
)

COMMENTS OF NYNEX CORPORATION

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SUMMARY

NYNEX's Comments point out that allocating spectrum is only the first step in making PCS a reality. The Commission also must ensure the participation of PCS providers with significant technical, financial, and marketing resources to bring PCS service to consumers. The PCS market should reflect the same broad range of participants as the U.S. telecommunications industry as a whole. To assure the success of PCS, the Commission must allow the nation's local exchange carriers and cellular providers an opportunity to participate. If PCS services are to be deployed quickly to the widest range of customers, carriers with established telecommunications infrastructures, skills and experience must be among the eligible PCS participants. Therefore, NYNEX maintains that the Commission should adopt PCS rules that give LECs full rights to apply for PCS licenses.

NYNEX addresses the misperception that LECs with cellular affiliates do not need additional spectrum. Cellular spectrum alone is simply an insufficient resource to satisfy all mass market demands for mobility. Cellular carriers do not have enough spectrum to serve the "car phone" market, the current portable pedestrian market and the customers who will comprise the PCS mass market. In addition, NYNEX argues that cellular carriers should be eligible for 2 GHz PCS licenses outside their current service areas and 900 MHz PCS licenses inside current service areas for the provision of mobile data services.

NYNEX encourages the Commission to license the maximum number of PCS participants possible. This will encourage entrepreneurial firms to enter the market and to ensure that "the market" determines adequate service areas. To most effectively protect consumers and to place all competitors on an equal footing, the FCC should designate PCS as common carriage. Finally, NYNEX urges that applicants for PCS licenses demonstrate their financial and technical credentials via a process of comparative hearings.

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COMMENTS OF NYNEX CORPORATION

NYNEX Corporation ("NYNEX") submits these Comments pursuant to a Notice of Proposed Rulemaking and Tentative Decision of the Federal Communications Commission ("Notice") seeking comprehensive comment on the further development and regulatory treatment of Personal Communications Services ("PCS").

I. INTRODUCTION

The Commission has identified a growing need for instantaneous communications and predicts that, within a decade, Personal Communications Services will fill that need for 60 million people in the United States. The Commission proposes to allocate 110 MHz of spectrum - - - one of the largest allocations in Commission history - - - to make PCS

possible. Allocating spectrum is the obvious first step in turning "60 million (PCS) customers" from an estimate to a reality. However, the Commission must ensure the participation of PCS providers with significant technical, financial, and marketing resources to bring PCS services to this broad base of consumers.

Myriad potential providers are now conducting PCS trials under approximately 200 experimental licenses. Consequently, the Commission may have no difficulty finding ready and willing licensees. It is certainly true that the PCS market of the future will, and should, reflect the same broad range of participants as the U.S. telecommunications industry as a whole. But to assure the success of PCS, the Commission must allow the nation's local exchange carriers ("LECs") and cellular providers an opportunity to participate. If PCS services are to be deployed quickly to the widest range of customers, carriers with established telecommunications infrastructures, skills and experience must be among the eligible PCS participants. Thus, PCS will develop only if the Commission avoids expedient "compromises" that exclude the LECs or that relegate them to an inferior license category.

In the Notice, the Commission implies that many LECs may not need spectrum in their service areas because they have cellular affiliates. However, even if the NYNEX Telephone Companies had access to current cellular spectrum (and they do not), they would not be able to use that spectrum to satisfy the full range of PCS demands currently projected. Cellular spectrum alone is simply an insufficient resource to satisfy

all mass market demands for mobility. In other words, cellular carriers do not have enough spectrum to serve the "car phone" market, the current portable pedestrian market and the 60 million customers who will comprise the PCS mass market.

We have no doubt that some commenters in this docket will oppose LEC eligibility, arguing that two risks - - - cross subsidization and discrimination - - - outweigh the benefit of LEC participation in PCS. Such opposition is raised whenever the question of LEC participation in any activity is debated before this Commission. The Commission has properly rejected these arguments in other contexts. Here, the benefits of full LEC participation in PCS overwhelmingly outweigh any alleged risks. The Commission should adopt PCS rules that give LECs full rights to apply for PCS licenses.

In this proceeding, the FCC will also make choices about market structure that are critical to the success of PCS. To encourage competition and innovation, the Commission should license the maximum number of PCS participants technically possible. Certainly, five licensees per service area should be viewed as necessary and sufficient. Further, to encourage entrepreneurial firms to enter the market and to ensure that "the market" determines adequate service areas, initial PCS service areas should be geographically compact. To most effectively protect consumers and to place all competitors - PCS, wireline, and cellular - on an equal footing, the FCC should designate PCS as common carriage. Finally, applicants for PCS licenses should demonstrate their financial and technical credentials via a process of comparative hearings.

II. PERSONAL COMMUNICATIONS SERVICES AND THE NATION'S TELECOMMUNICATIONS INFRASTRUCTURE ARE INEXTRICABLY INTERTWINED

The Commission has identified a growing demand by consumers and businesses for instantaneous communications.¹ The Commission has tentatively quantified this demand by citing several consumer studies which project a possible PCS user population of "over 60 million in the U.S. within ten years."² The Commission notes that, "while cellular and specialized mobile radio services will be able to provide some of the new communications requirements within their currently allocated spectrum, they cannot meet the full range of demand for PCS ... "³

The Commission i) proposes "the establishment of a new PCS service"⁴ . . . to meet consumer demand; and ii) announces its "goal to allocate sufficient spectrum and establish rules to allow the widest possible range of such services."⁵ The Commission proposes the allocation of 110

1 Notice, para. 25.

2 Notice, para. 26.

3 Notice, para. 25. The Commission also observes that "consumer requirements for PCS increasingly are international" and notes that a worldwide allocation for PCS-like services was determined at the World Administrative Radio Conference ("WARC") and that services which are similar in concept to PCS are expected to use the 1885-2025 MHz and 2110-2200 MHz bands. This extends the dimensions of the impact the Commission's policy decisions regarding PCS development will have on the telecommunications infrastructure of the nation.

4 Notice, para. 28.

5 Id.

MHz of 2 GHz spectrum as well as 3 MHz of 900 MHz spectrum⁶ for narrow band operations.

This would be one of the largest allocations to a common carrier service in the history of the Commission.⁷ In 1981, for example, the Commission initially allocated only 40 MHz of spectrum for cellular service. A large allocation for PCS is consistent with the dramatic market penetration which the Commission predicts PCS will achieve. The projected PCS subscriber base of 60 million within 10 years is over six times larger than the 9 million subscribers currently served by the cellular industry. Moreover, 60 million PCS users represent a subscriber penetration of approximately 24% of the population of the nation. To accomplish this penetration the service must be usable by the entire U.S. population, requiring the construction and operation of PCS systems which presumably will offer a geographical coverage and a grade of service similar to that of land line telephone services. This is a daunting task especially when one considers that the telephone industry did

⁶ Notice, para. 32. Note, the 900 MHz spectrum to be allocated in Docket 92-100 for the provision of narrow band PCS will provide different capabilities from the services envisioned through the wide band PCS bands. Narrow band operations provide advanced technology paging services which are separable from the services provided by cellular carriers or wide band PCS providers. It would not be in the public interest to bar either LECs with cellular affiliates or other cellular providers from participating in this market.

⁷ In NYNEX's view, PCS services, although not yet classified, should be classified as common carrier services. The criteria for common carriage is that the provider of common carrier services holds itself out indiscriminately to the public. (See discussion at p. 24 infra.)

not achieve a subscriber base of 60 million subscribers until 1956, some eighty years after the invention of the telephone. Thus, the Commission is proposing an action of enormous magnitude which is designed to have a broad and revolutionary⁸ impact on the domestic telecommunications infrastructure.

However, obtaining spectrum is just the beginning. A PCS provider must have the means to locate its customer as he or she moves around, recognize that same customer when he or she wishes to make a call, complete the customer's calls to locations on various wireline (and other wireless) networks, and locate other "tetherless" customers on its own network with whom the customer may wish to communicate. Anything less means that the customer would be impaired in his or her ability to make and receive calls.

To meet minimum customer expectations for PCS, therefore, will take network intelligence, interconnection among many carriers, common channel signalling capabilities, and a significant exchange of information among carriers for customer location, call completion, billing and compensation purposes.⁹ These activities will not take place in the

⁸ Notice, para. 3.

⁹ PCS customers may also want to use custom calling services such as call forwarding and call waiting. At particular times during the day (or the week), they may wish to have calls made to their PCS number go instead to a home or office telephone or to voice mail. They may wish to selectively take, or reject, calls made to their PCS number. Offering these choices requires sophisticated signalling and even more network intelligence.

wireless portion of a PCS system - that is, between the customer and the radio port. Rather, they will occur in wireline networks. That is why an intelligent network is vital to the success of PCS. Without the means to locate customers, route their calls across any and all networks, and to accurately bill for service, spectrum does a PCS provider little good.

Customers will want access to a complement of useful features including the ability to choose whether and how they wish to originate and receive calls. The performance that the public has grown accustomed to through the use of wireline services is the benchmark against which the acceptability of wireless services will be judged. The deployment of PCS services which are of similar quality to those offered on the public switched telephone network will require the use of a sophisticated infrastructure. The LECs are incorporating intelligence into their wireline networks that can greatly facilitate use of wireless services by all customers.

Customers using PCS -- regardless of their PCS provider -- will be able to interact with the network to obtain functionality particularly suited for their use.

The Commission is correct in concluding that LECs should participate in the PCS market.¹⁰ LEC participation in all aspects of PCS will foster the more rapid and efficient deployment of PCS. For example, it will encourage the further development of intelligent network features that are integral

¹⁰ See, Notice, paras. 71-80.

to PCS itself. The wireline infrastructure can provide the backbone network capability to locate PCS customers, route calls efficiently and provide interconnection with a variety of existing networks. Such an infrastructure is necessary to organize and manage the number of elements that comprise PCS services.

III. THE COMMISSION'S RULE MAKING MUST PROVIDE FOR LEC ELIGIBILITY FOR PCS SPECTRUM ALLOCATIONS

PCS will be focused on the mass consumer market, offering less costly services with limited mobility integrated with the existing public switched telephone network. PCS technology will be adapted to mass market demands, especially as wireline and PCS applications combine.¹¹

The Commission outlines four values which it will "attempt to optimize and balance ... in providing spectrum and a regulatory structure for PCS."¹² The four values are: universality; speed of deployment; diversity of services; and competitive delivery. The benefits of diversity of services and competitive delivery will proceed naturally from the fact of multiple providers and the innovation that has characterized the telecommunications industry. Universality and speed of deployment present more difficult challenges; yet these are the most critical of the four factors if PCS is to be available to all Americans within a reasonable period of time.

¹¹ See, Byrnes, J. and Townsend, R., Report In Support of NYNEX Filing, LEC Role In PCS Market Development at p. 21 (Appendix A). ("Byrnes Report")

¹² Notice, para. 6.

In all of its actions, the Commission has the statutory responsibility "to make available, so far as possible, to all the people of the United States a rapid, efficient, nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges" ¹³ The Commission can fulfill this statutory mandate if LECs are eligible to become PCS providers and allowed to develop the complementary features and integrated operations between wireline and wireless services.

The LECs' technological aptitude is matched by a solid understanding of their entire customer base. This customer base, including small business and residential users, will comprise the mass market for PCS. "LECs, uniquely among telecommunications firms, have the strategic imperative, unique capability, and heritage of ubiquitous service in all communities to develop mass markets to serve all customers, including small business and residences." ¹⁴ In fact, if the LECs are excluded from the PCS license process, it is likely that the development of mass market PCS will be stalled, the regulatory goals of this proceeding will be thwarted and the Commission's statutory mandate will, for the provision of PCS, remain unfulfilled.

¹³ Communications Act of 1934, 47 U.S.C. § 151.

¹⁴ See, Byrnes Report at p. 10.

A. Universality

Local exchange service in the United States is unrivaled in the world. The local exchange network provides telecommunications service, day in and day out, to over 100 million business and residential customers and their families; this is a demonstration of public interest, convenience and necessity which is unparalleled in scale and scope.

As subscribers demand portability of telecommunications services, LECs must be able to deploy radio technologies necessary to satisfy these subscribers. The LECs' use of wireless technology in the local exchange is a natural extension of the existing capabilities of the public switched telephone network. The Commission should not preclude LECs from utilizing new technology to offer the same kind of services they already offer. Less than one week ago the State of New York Public Service Commission ("NYPSC") issued a statement noting, inter alia, "PCS promises to offer consumers expanded portability in their telephone service . . . , as an important component of their telecommunications needs."¹⁵ The LECs' introduction of radio technologies as a delivery mechanism for the provision of basic exchange service will provide enhanced cordless capability that will offer mobility around the office, farm or home.

As noted in the Byrnes Report, large businesses already have the benefit of many sophisticated

¹⁵ See, NYPSC, In the Matter of Establishing General Policy Principles for Personal Communications Services, October 30, 1992. ("NYPSC PCS Statement").

telecommunications options.¹⁶ Small business owners and residential users, i.e., the mass market for PCS, will require an equally sophisticated customer education and support process. "This customer education and support process is, in fact, a crucial component in this [PCS] development."¹⁷ LECs have an established and fundamental interest in expanding telecommunications markets to serve all users, including their fundamental customer base - the mass market of small businesses and residential subscribers.

B. Speed of Deployment

Ubiquity, quality and speed of deployment of PCS will be critical to broad-based acceptance of PCS by the public and will require substantial financial and technical resources. PCS services must be attractive in terms of use and accessible in terms of price. Applicants for PCS licenses must combine the technical expertise, financial capability and operational competence necessary to locate and obtain sites, construct, place into operation and maintain several thousand base stations and backbone transport as well as the switching capacity to handle millions of busy hour calls. These qualifications are absolute requirements if the development of PCS systems is to be carried forward as swiftly as possible.¹⁸ LECs are proven qualified telecommunications

¹⁶ See, Byrnes Report, p. 16.

¹⁷ Id., p. 18.

¹⁸ See, Notice, para. 6.

providers who have the technical expertise, management experience and financial stability to deploy PCS networks.¹⁹ For example, in order to provide state-of-the-art communications services to the people and businesses in the 85,516 square miles that NYNEX serves, NYNEX has deployed 1340 central office switches covering 12 LATAs; these switches serve a total of 15.5 million access lines consisting of 4.5 million business, 10.5 million residential, and 0.5 million public telephone lines. In addition, as back bone facilities, NYNEX has placed 263,900 miles of cable. By 1994, 78% of NYNEX access lines will be SS7 capable.

These "in-place" physical facilities form the foundation and starting point for the rapid deployment of PCS services. In addition, the NYNEX Telephone Companies have the organization and manpower necessary to bring PCS quickly to market. The resources include over 37,000 operations personnel, 52 Cable Installation Centers, 49 Maintenance Centers and 115 Customer Service Centers. Of course, the NYNEX Telephone Companies will properly account for the use of such personnel, equipment and facilities for PCS.

¹⁹ One of the most crucial components in any firm's efficiency is the skill of its employees and their experience in performing the task at hand. The 84 thousand employees of NYNEX possess over one million employee years of experience in providing telecommunications services to the very consumers whose evolving needs now require instantaneous communications.

C. Diversity of Services

The initial deployment of radio facilities to provide basic exchange services will also make it possible to offer ancillary exchange services such as wireless public telephone service of the telepoint variety, providing a valuable alternative to public telephone service in urban areas and providing increased security to those people wishing to use public telephone service by avoiding the misappropriation of personal calling card numbers.

NYNEX is currently examining the economic feasibility and market acceptability of a potential wireless public telephone service. This telepoint-type service will expand the use of customer-owned cordless telephones from homes and offices to more public places. Using a customer-owned cordless handset a customer could access the public switched telephone network wherever base stations are available. Last month, NYNEX began the first phase of a 24 month market trial of its Cordless Charge-A-CallSM service in Boston, Massachusetts. NYNEX is conducting the trial pursuant to its wireless access experimental license and will report initial results in its next periodic progress report to the FCC.

In addition, NYNEX is examining the use of radio as an alternative transmission medium in the urban and suburban portion of its LEC distribution plant, in particular, replacement of the last few hundred feet of copper cable before a customer's home with low power digital radio. This will enable NYNEX to provide the full panoply of current and future network services to customers quickly, thus ensuring rapid

deployment of PCS services to a broad customer base at competitive prices; fulfilling the goals of the Commission in this proceeding.²⁰ Recently, NYNEX installed a wireless loop access system in Brooklyn, New York. The system is a prototype based on TDMA technology research conducted by Bellcore. NYNEX is inquiring about the broad scale availability of equipment for wireless loop with a number of equipment vendors, pursuant to its Request For Information. NYNEX is optimistic that performing these radio experiments will fulfill the expanded portability needs of consumers and further, demonstrate that "radio technology may be beneficial in lowering local exchange service costs" ²¹

D. Competitive Delivery

The Commission has "placed its faith in competitive markets and service flexibility as the best path to provide greater choice and low prices for consumers."²² The Commission has also stated that it intends "to ensure that all mobile services are provided with the highest quality at

²⁰ See, Notice, para. 6.

²¹ NYPSC PCS Statement, p. 2. Also, in its sixth experimental license periodic report to the FCC (dated July 14, 1992), NYNEX Science & Technology, Inc. presented the results of its initial economic feasibility analysis for the use of radio technology as an alternative transmission medium in the urban and suburban distribution plant. In its analysis, NYNEX Science & Technology, Inc. compared the Installed First Cost and Life Cycle Cost of wireless loops to those comprised of fiber and copper. Based on the initial results of the analysis, NYNEX now believes radio technology to be a cost effective alternative transmission medium.

²² Notice, para. 2.

low-cost, reasonable rates to the greatest number of consumers, consistent with the goals of the Communications Act."²³

Competition among entities that have the technical, financial and service commitment qualifications to successfully bring PCS to market will accomplish the Commission's goal. The public interest, and not competition per se, is the Commission's central concern.²⁴ Therefore, the real question is not whether there should be competition, but how competition should be shaped. The Commission indicates its awareness that possible benefits, including innovation, could result from the licensing of four or five PCS operators per market and seeks comment on the merits of this proposal.²⁵

Under the category Eligibility Requirements²⁶, the Commission raises questions concerning the eligibility of only two types of enterprises, namely, cellular carriers and LECs. The Commission expresses no concern with respect to the eligibility of interexchange carriers, telecommunications equipment manufacturers, cable companies and fixed utilities or any of the myriad of entities which might carry out an

²³ Notice, para. 6.

²⁴ Hawaiian Telephone Company v. F.C.C., 498 F.2d 771, at 776.

²⁵ In addition, the Commission indicates its expectation "that PCS and cellular licensees serving the same area . . . will compete on price and quality." Notice, para. 63. Presumably, Specialized Mobile Radio Service providers such as Fleet Call will also be in a position to evolve their services to provide services which, though not identical to PCS, will also compete. (See discussion at p. 26 infra.)

²⁶ Notice, paras. 63 through 81.

enterprise of the magnitude of PCS. The current negotiations between AT&T and McCaw Cellular Communications, Inc. ("McCaw"), in which AT&T proposes to purchase a significant, and perhaps a controlling interest in McCaw, is evidence that other significant participants in the communications industry are profoundly interested in entering the wireless communications market on a local level. Any eligibility concerns the Commission may have with regard to cellular carriers and LECs are surely offset by similar concerns that can be expressed as to interexchange carriers, cable companies, etc. Rather than attempting to eliminate any of these potential participants, the Commission should recognize that the market will be best served by fostering competition among all entities that have the requisite technical, financial and service commitment qualifications to provide instantaneous communications.

The Commission notes that PCS is likely to be both a complement and potential competitor to local wireline exchange service. New York State regulators agree:

"PCS also may stimulate local exchange service competition, including residential basic service."²⁷

Obviously, the Commission is aware that PCS is intimately related to local exchange service. It does not serve the public interest for those entities best situated to provide PCS services, precisely because they are best situated, to be barred from, or severely limited in their capacity to, provide PCS services.

²⁷ NYPSC PCS Statement, p. 3.

To deny LECs the right to obtain PCS frequencies, in the same quantities and within the same spectrum allocation as others, is to deny LECs the right to increase their efficiency and to effectively compete in the market they have served for many years.²⁸

IV. UNDER SOME CIRCUMSTANCES CELLULAR CARRIERS SHOULD BE ELIGIBLE FOR PCS LICENSES

A. Incumbent Cellular Licensees Should Be Eligible for 2 GHz PCS Licenses Outside Their Current Service Areas

The Commission has proposed that cellular carriers be eligible for PCS licenses outside their current service area.²⁹ The Commission should adopt this proposal.³⁰

²⁸ Regardless of the Commission's ultimate decision concerning LEC eligibility, NYNEX supports the Commission's proposal that "PCS licensees have a federally protected right to interconnection with the public switched telephone network." Moreover, PCS licensees should have the right to interconnection with other infrastructures, such as: cable television; interexchange networks; and cellular networks. Interconnection among networks is fundamental to the rapid development and success of PCS.

²⁹ See, Notice, Appendix A: Proposed Rules, Part 99 -- Personal Communications Services, § 99.13. See also Notice, para. 67.

³⁰ In addition, there are compelling reasons to allow cellular carriers to be eligible for 2 GHz licenses within their current service area, not to replicate existing cellular service, but to allow cellular carriers to provide data services. The Commission recognizes the efficiencies to be gained by such a license;

"There may be some economies of scope between PCS and cellular service to the extent that a single firm holding both a cellular and a PCS license would have lower unit costs than would two firms separately holding each license." See Notice, para. 66.

NYNEX's cellular services affiliate is a recognized provider of high quality cellular service in the northeast. It has successfully deployed microcell technology within its current allocation in high pedestrian traffic areas such as the New York's Penn Station and Madison Square Garden. Many aspects of this technology, including learning curve economics, apply to prospective services in the 2 GHz band.

It is not clear whether the Commission is fully aware of the progress incumbent cellular carriers have made in meeting the requirements of building a network, sales channels, customer support, and all the accompanying infrastructure necessary for commercial success.³¹

Sales channels and marketing support for new services, if the cellular experience is any indication, are at least as significant for new PCS carriers as the underlying PCS network. The cellular industry surmounted the challenge of managing significant growth by developing and staffing sales and marketing forces with trained professionals and customer focused support systems. NYNEX has made the investment in people and systems to deliver high quality service in the cellular industry. Many of these skills and investments can be reused for PCS thereby reducing the substantial capital costs a new entrant might seek to recover from customers.

³¹ NYNEX continues to invest in its cellular networks at an unprecedented level. The technology base of the network is moving from analog to digital in order to gain greater economies of scale through multiplexing techniques, and this technology change is occurring now. NYNEX is readying its cellular network to provide services to meet current challenges.

In addition, NYNEX possesses skills in customer service and support, real estate management, contract supervision, fleet management and engineering specifications. As the Commission indicates, cellular carriers can apply these investments and skills to PCS services.

NYNEX has made investments in mobile technologies and businesses because there is customer demand for mobile services. The Commission is correct in its view that customers value the benefits of mobility. Customers also value the greater sense of personal security cellular service can provide. NYNEX believes in the potential of PCS and NYNEX expects to invest in developing PCS services in the new spectrum.

B. Cellular Carriers Should Be Eligible to Obtain Spectrum In the 900 MHz Band Within Their Cellular Geographic Service Areas.

The Commission specifically requested commenters to address whether cellular providers should be eligible to hold licenses for the 900 MHz band which the Commission proposed to allocate for PCS services.³² These bands should be available to current cellular providers for the implementation of mobile PCS data services. Cellular carriers must have the ability to provide mobile data services in order to offer their customers data services which would compete with those provided by PCS data providers.

³² See Notice, para. 67. See also, Notice, para. 50 where the Commission defines these bands as the 901-902 and 940-941 MHz for paired use and the 930-931 MHz for unpaired use.

In early 1990, McCaw filed a petition which described the increasing demand for mobile data services. Since that time the demand has grown as evidenced by the number of cellular carriers who have participated in the industry adoption of a generic specification for cellular mobile packet data services. Potential uses of mobile data would include inventory control, fleet management functions, remote data entry and access, mobile office functions, and other specialized data network services which can be provided to customers on the move.

The Commission has made it clear that increased competition among PCS providers is likely to result in lower prices, improved services and increased product innovation.³³ Having the ability to obtain a 900 MHz license will ensure that cellular carriers are able to compete with others in the mobile marketplace for data as well as voice services. Permitting cellular carriers to obtain the spectrum needed to provide mobile data within their cellular geographic service areas will ensure that this type of service will be brought to the consumer expeditiously. Otherwise, cellular carriers may not possess spectrum adequate for the provision of dedicated data services and cellular consumers in a given cellular geographic service area may not have the option to obtain mobile data services from their carrier of choice.

³³ Notice, para. 63.

V. THE COMMISSION SHOULD DESIGNATE PCS SERVICE AREAS THAT CONFORM TO PARTICULAR USER NEEDS AND THE ATTRIBUTES OF SUCH SERVICES

A. The Commission Should Not Allocate PCS on a Nationwide Basis

The Commission seeks comment on whether or not to grant nationwide PCS licenses.³⁴ Although the Commission does not offer a definition of what a nationwide license encompasses, there are reasons to be concerned that awarding a nationwide license might work against the Commission's goals for competition, speed of delivery, and service diversity. A nationwide carrier may more easily defeat smaller competitors in specific targeted, high-profile markets.

Investors may be reluctant to make capital available to small upstart firms planning limited entry into local markets who would be competing against a formidable nationwide competitor. Service diversity could be curtailed because national licensees might choose to limit their service offerings to high volume applications capable of sustaining the very large costs a national licensee would face. Competition could be diminished because such a carrier would have little or no incentive to interconnect its offering with other network providers.³⁵ If there is merit to the concept of a national service provider, such merit will be demonstrated in the marketplace. Those providers who wish to build up a national

³⁴ Notice, para. 60, Option 4.

³⁵ The Commission's goal of universal operability would be better served by encouraging interconnection standards rather than reducing the number of competitors.